Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1 and 3-16 are pending in the application, with 1, 10, 12 and 13 being the independent claims. These changes are believed to introduce no new matter. Further, these changes are directed to issues that have already been considered by the Examiner; thus there are no new issues requiring further consideration and/or search. Entry of these amendments is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Rejections under 35 U.S.C. § 112

Claims 14 and 15 stand rejected as being allegedly indefinite for using the trade names Kapton and Mylar. Kapton is well known in the art to be a polyimide film. Claim 14 has thus been amended to recite "a polyimide film" instead of "kapton." Similarly, Mylar is well known in the art to be a thin polyester film. Therefore, claim 15 has been amended to recite "a thin polyester film" instead of "mylar." Reconsideration and withdrawal of the rejections of claims 14 and 15 are respectfully requested.

Rejections under 35 U.S.C. § 102

Claims 10-13 stand rejected under 35 U.S.C. 102(b) as being allegedly anticipated by U.S. Pat. No. 4,550,592 to Deschape ("Deschape"). Applicants respectfully traverse.

Claim 10 recites "a reference leg having a reference probe coupled thereto, the reference probe located proximate to a reference surface," and a diaphragm pressure sensor, "wherein the diaphragm pressure sensor detects changes in pressure in the measurement leg caused by a change in distance between the measurement probe and a measurement surface as compared to a distance between the reference probe and the reference surface." Deschape neither teaches nor suggests the combination of such features. For at least these reasons, Applicants respectfully submit that claim 10 is patentable over Deschape. Reconsideration and withdrawal of the rejection of claim 10 is respectfully requested.

Claim 11 depends from claim 10 and is thus patentable for at least the reasons discussed with respect to claim 10, and further in view of its own respective features. For example, claim 11 recites "a diaphragm having a rigid outer portion and a displaceable inner portion." Deschape merely states that its "differential pressure transducer consists essentially of a silicon sensor chip on a sensing diaphragm" (*see*, Deschape, col. 3, lines 61-63). Deschape does not, however, discuss any sort of structure of the sensing diaphragm. Therefore, Deschape neither teaches nor suggests "a diaphragm having a rigid outer portion and a displaceable inner portion" as recited in claim 11. Applicants respectfully submit that claim 11 is thus patentable over Deschape. Reconsideration and withdrawal of the rejection of claim 11 is respectfully requested.

Regarding claims 12 and 13, each recites "a measurement leg having a measurement probe coupled thereto, the measurement probe located proximate to a measurement surface" wherein a pressure difference between the measurement leg and the reference leg is "caused by a change in distance between the measurement probe and the measurement surface." As discussed with respect to claim 10, Deschape neither teaches nor suggests such features. Additionally, claims 12 and 13 each recite "a diaphragm having a rigid outer portion and a displaceable inner portion." As discussed with respect to claim 11, Deschape does not discuss any sort of structure for its sensing diaphragm, and thus does not teach or suggest this feature. For at least these reasons, Applicants submit that claims 12 and 13 are patentable over Deschape. Reconsideration and withdrawal of the rejections of claims 12 and 13 are respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1 and 3-7 stand rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over U.S. Pat. No. 6,496,265 to Duncan et al. ("Duncan") in view of U.S. Pat. No. 3,322,980 to Faure ("Faure"). Applicants respectfully traverse.

Claim 1 recites "a diaphragm positioned within a body, the diaphragm having a rigid outer portion coupled to an inner wall of the body and a displaceable semi-elastic inner portion coupled to the rigid outer portion." The combination of Duncan and Faure neither teaches nor suggests such features. The sensor in Duncan is a stand-alone sensor, and does not include a rigid outer portion coupled to an inner wall of a body as recited in claim 1. Further, the inner portion of the diaphragm of Duncan is not semi-elastic, but is instead milled from the same material as the remaining portion of the fixture (*see*,

Duncan, col. 9, lines 1-11). It is this stiffness that causes the diaphragm of Duncan to have "limited dynamic range" (*see*, Duncan, col. 10, lines 40-41). Thus, Duncan does not teach or suggest a "semi-elastic inner portion coupled to the rigid outer portion" as recited in claim 1.

The Examiner combines Faure with Duncan to show that Duncan can be modified to be sensitive to a given pressure. However, the combination with Faure does not cure the deficiencies of Duncan, as the combination still does not teach or suggest "a diaphragm positioned within a body, the diaphragm having a rigid outer portion coupled to an inner wall of the body and a displaceable semi-elastic inner portion coupled to the rigid outer portion."

For at least these reasons, Applicants respectfully submit that claim 1 is patentable over the combination of Duncan and Faure. Reconsideration and withdrawal of the rejection of claim 1 is respectfully requested.

Claims 3-7 depend directly or indirectly from claim 1, and are thus patentable over Duncan in view of Faure for at least the reasons discussed with respect to claim 1, and further in view of their own respective features. Reconsideration and withdrawal of the rejections of claims 3-7 are respectfully requested.

Claim 8 stands rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Duncan in view of Faure, and further in view of U.S. Pat. No. 5,880,841 to Marron et al. ("Marron"). Applicants respectfully traverse. Claim 8 depends indirectly from claim 1, and is thus patentable over the combination of Duncan and Faure for at least the reasons discussed with respect to claim 1, and further in view of its own respective

features. Adding Marron to the combination of Duncan and Faure does not cure the deficiencies of the combination as discussed with respect to claim 1.

Further, claim 8 recites a pressure gauge, "wherein the light transmitting module comprises first and second transmitting fibers." The Examiner states that Marron teaches transmitting a first light at a first wavelength and a second light at a second wavelength. However, this is not the same as using first and second transmitting fibers to transmit the light, as recited in claim 8. Marron only discusses a system in which a beam splitter is used to split light from a single source into first and second beams (*see*, Marron, col. 4, lines 61-63). Marron does not, however, teach or suggest the use of first and second transmitting fibers as recited in claim 8.

For at least these reasons, Applicants submit that claim 8 is patentable over the combination of Duncan, Faure, and Marron. Reconsideration and withdrawal of the rejection of claim 8 is respectfully requested.

Claim 9 stands rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Duncan in view of Faure, and further in view of U.S. Pat. No. 6,105,436 to Lischer et al. ("Lischer"). Applicants respectfully traverse. Claim 9 depends from claim 1, and is thus patentable over the combination of Duncan and Faure for at least the reasons discussed with respect to claim 1, and further in view of its own respective features. Adding Lischer to the combination of Duncan and Faure does not cure the deficiencies of the combination as discussed with respect to claim 1. For at least these reasons, Applicants respectfully submit that claim 9 is patentable over the combination of Duncan, Faure, and Lischer. Reconsideration and withdrawal of the rejection of claim 9 is respectfully requested.

Claim 14 stands rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Duncan in view of Faure, and further in view of U.S. Pat. No. 4,869,282 to Sittler et al. ("Sittler"). Applicants respectfully traverse. Claim 14 depends from claim 1, and is thus patentable over the combination of Duncan and Faure for at least the reasons discussed with respect to claim 1, and further in view of its own respective features. Adding Sittler to the combination of Duncan and Faure does not cure the deficiencies of the combination as discussed with respect to claim 1. For at least these reasons, Applicants submit that claim 14 is patentable over the combination of Duncan, Faure, and Sittler. Reconsideration and withdrawal of the rejection of claim 14 is respectfully requested.

Claim 15 stands rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Duncan in view of Faure, and further in view of U.S. Pat. No. 5,570,428 to Madaffari et al. ("Madaffari"). Applicants respectfully traverse. Claim 15 depends from claim 1, and is thus patentable over the combination of Duncan and Faure for at least the reasons discussed with respect to claim 1, and further in view of its own respective features. Adding Madaffari to the combination of Duncan and Faure does not cure the deficiencies of the combination as discussed with respect to claim 1. For at least these reasons, Applicants submit that claim 15 is patentable over the combination of Duncan, Faure, and Madaffari. Reconsideration and withdrawal of the rejection of claim 15 is respectfully requested.

Claim 16 stands rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Duncan in view of Faure, and further in view of U.S. Pat. No. 5,281,782 to Conatser ("Conatser"). Applicants respectfully traverse. Claim 16 depends from claim 1, and is

thus patentable over the combination of Duncan and Faure for at least the reasons discussed with respect to claim 1, and further in view of its own respective features. Adding Conatser to the combination of Duncan and Faure does not cure the deficiencies of the combination as discussed with respect to claim 1.

Further, Conatser actually teaches away from the use of rubber in a sensing diaphragm. Conatser specifically states that a rigid plastic is preferred as the primary diaphragm member, as softer diaphragm materials such as rubber corrode too easily (*see*, Conatser, col. 5, lines 7-12). Because Conatser teaches away from using rubber, there is no motivation for one of skill in the art to combine Conatser with Duncan and Faure to result in a system that uses rubber.

For at least these reasons, Applicants submit that claim 16 is patentable over the combination of Duncan, Faure, and Conatser. Reconsideration and withdrawal of the rejection of claim 16 is respectfully requested.

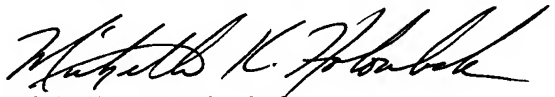
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Michelle K. Holoubek
Attorney for Applicants
Registration No. 54,179

Date: March 28, 2006

1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

513470_1.DOC